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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,866	04/16/2001	Heinz Willebrand	69971	5585

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EXAMINER	
PHAN, HANH	

ART UNIT	PAPER NUMBER
2633	15

DATE MAILED: 01/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/835,866	WILLEBRAND, HEINZ	
	Examiner	Art Unit	
	Hanh Phan	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 April 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed 10/06/2003.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-12, 15-26 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Izadpanah et al (Pub. No. US 2002/0122230 A1) in view of Wiedeman (US Patent No. 6,587,687).

Regarding claims 1, 3, 7, 17, 23 and 25, referring to Figures 1a, 2, 3b and 3c, Izadpanah discloses a method of managing a free-space optical network, comprising the steps of:

directing network data traffic (104, 106)(Fig. 1a) over one or more free-space optical links in the free-space optical network ;

monitoring (108)(Fig. 1a) one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links;

determining whether or not there is more than one alternate communication path available; and

routing the network data traffic through an alternate communication path in response to data obtained from the step of monitoring one or more environmental

conditions in a vicinity of at least one of the one or more free-space optical links (see page 3, paragraphs [0037]-[0049].

Izadpanah differs from claims 1, 3, 7, 17, 23 and 25 in that he fails to teach determining whether or not there is more than one alternate communication path available. However, Wiedeman teaches determining whether or not there is more than one alternate communication path available (Figs. 3, 4, 7, 12 and 13, col. 8, lines 6-30, col. 10, lines 18-63, col. 12, lines 18-67 and col. 13, lines 1-67). Therefore, it would have been obvious to one having skill in the art the time the invention was made to incorporate the determining whether or not there is more than one alternate communication path available as taught of Wiedeman in the system of Izadpanah. One skill in the art would have been motivated to do this since Wiedeman suggests in column col. 8, lines 6-30, col. 10, lines 18-63, col. 12, lines 18-67 that using such determining whether or not there is more than one alternate communication path available have advantage of allowing increasing communication connectivity and reliability.

Regarding claims 2, 16 and 24, the combination of Izadpanah and Wiedeman teaches wherein the alternate communication path comprises a communication path that is not adversely affected by the one or more environmental conditions (Fig. 1 a of Izadpanah and Figs. 3 and 4 of Wiedeman).

Regarding claims 4, 18 and 21, the combination of Izadpanah and Wiedeman teaches wherein the alternate communication path comprises a radio frequency (RF) communication path (Fig. 1 a of Izadpanah and Figs. 3 and 4 of Wiedeman).

Regarding claims 5 and 19, the combination of Izadpanah and Wiedeman teaches wherein the alternate communication path comprises a fiber optic communication path (Fig. 1 a of Izadpanah and Figs. 3 and 4 of Wiedeman).

Regarding claims 8, 22 and 26, the combination of Izadpanah and Wiedeman teaches rerouting the network data traffic over the one or more free-space optical links in the free-space optical network in response to additional data obtained from monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links (see page 3 of Izadpanah, paragraphs [0037]-[0049] and Figs. 3, 4, 7, 12 and 13 of Wiedeman, col. 8, lines 6-30, col. 10, lines 18-63, col. 12, lines 18-67 and col. 13, lines 1-67).

Regarding claims 9-12, the combination of Izadpanah and Wiedeman teaches collecting data indicative of at least one of the one or more environmental conditions with an instrument located in the vicinity of the at least one of the one or more free-space optical links (see page 3 of Izadpanah, paragraphs [0037]-[0049] and Figs. 3, 4, 7, 12 and 13 of Wiedeman, col. 8, lines 6-30, col. 10, lines 18-63, col. 12, lines 18-67 and col. 13, lines 1-67).

Regarding claim 15, the combination of Izadpanah and Wiedeman teaches a method of managing a free-space optical network, comprising the steps of:

directing network data traffic over one or more free-space optical links in the free-space optical network;

monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links;

attempting to adjust one or both of a transmission power and receive sensitivity of one or more of the free-space optical links in response to data obtained from the step of monitoring one or more environmental conditions in a vicinity of at least one of the one or more free-space optical links; and

routing the network data traffic through an alternate communication path in response to a failure in the step of attempting to adjust (see page 3 of Izadpanah, paragraphs [0037]-[0049] and Figs. 13a-13d of Wiedeman, col. 13, lines 60-67, col. 14, lines 1-67, and col. 15, lines 1-54).

Regarding claims 31-34, the combination of Izadpanah and Wiedeman teaches selecting the alternate communication path (Fig. 1 a of Izadpanah and Figs. 3 and 4 of Wiedeman).

Regarding claims 6 and 20, the combination of Izadpanah and Wiedeman teaches alternate communication path comprises a wire communication path in order to allow the data can be freely transmitted through the alternate paths in the optical data transmission (Fig. 1 a of Izadpanah and Figs. 12 and 17 of Wiedeman).

4. Claims 13, 14 and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable Izadpanah et al (Pub. No. US 2002/0122230 A1) in view of Wiedeman (US Patent No. 6,587,687) and further in view of Bae (US Patent No. 5,790,286).

Regarding claims 13, 14 and 27-30, the combination of Izadpanah and Wiedeman differs from claims 13, 14 and 27-30 in that he fails to teach sending a alarm over the free-space optical network in response to the data indicative of at least one of of the one or more environmental conditions. However, Bae teaches sending a alarm

over the optical network in response to the data indicative of at least one of of the one or more environmental conditions (Fig. 3, col. 4, lines 12-67 and col. 5, lines 42). Although Bae does not teach sending a alarm over the free-space optical network. However, it would have been obvious to obtain sending a alarm over the free-space optical network in order to eliminate the wire connection, reduce size, weight of device and make device is portable. Therefore, it would have been obvious to one having skill in the art the time the invention was made to incorporate the sending a alarm over the optical network as taught of Bae in the system of the combination of Izadpanah and Wiedeman . One skill in the art would have been motivated to do this since Bae suggests in column 4, lines 61-67 and col. 5, lines 1-61 that using such sending a alarm over the optical network have advantage of allowing the data can be freely transmitted by embodying the duplication of paths in the optical data transmission.

Response to Arguments

5. Applicant's arguments with respect to claims 1-34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (703)306-5840.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (703)305-4729. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

Hanh Phan

12/24/2003